

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 57-021213  
(43)Date of publication of application : 03.02.1982

(51)Int.Cl.

B23B 51/02

(21)Application number : 55-096005  
(22)Date of filing : 14.07.1980

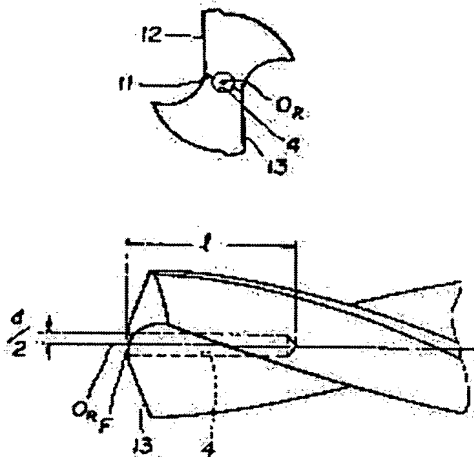
(71)Applicant : MITSUBISHI METAL CORP  
(72)Inventor : NEGISHI HIDEO  
GOTO KAORU  
TAKATANI SUEJI

## (54) DRILL

### (57)Abstract:

PURPOSE: To decrease a thrust load applied to a drill at drilling, by providing a long hole axially in the point end central part of a drill of solid type.

CONSTITUTION: A cylindrical round hole 4 is provided in such a manner as to divide a chisel edge 11 from a point end part F in the edge part with cutting edges 12, 13 of a drill toward the side of its shank. The round hole 4 is provided along the axial line of a drill main body not to leave a column shaped core part in a drilled hole. Depth  $l$  of the round hole is set to such a value that regrinding can be performed a suitable number of times. Substantial length of the chisel edge 11 with a large negative rake angle can be decreased by the provided round hole 4, thus a thrust load applied from that portion can be widely reduced.



## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]